

# NASA TECH BRIEF

## *Marshall Space Flight Center*



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### A Shut-Off Valve for Flexible Tubing

#### The problem:

Shut-off valves used with flexible tubing must, in many cases, be "normally closed" and provide a tight seal. (For example, the design of this valve was motivated by the need for such a clamp for a urine hose.)

#### The solution:

A simple, reliable, light weight valve was designed to be hand operated and to provide positive sealing in its normally closed position.

#### How it's done:

The valve as shown in Figure 1 is in the normally closed position. The two leaf springs force the jaws closed on the flexible tubing and shut off the flow through the hose.

Figure 2 shows the valve in the open position. When the lever is pressed down, the leaf springs and jaws are forced apart to allow liquid flow through the tube.

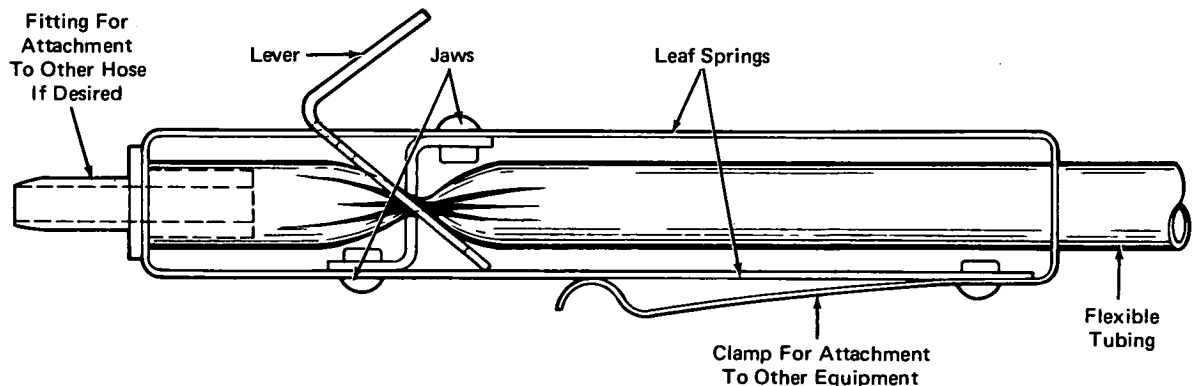


Figure 1. Valve in Normally Closed Position

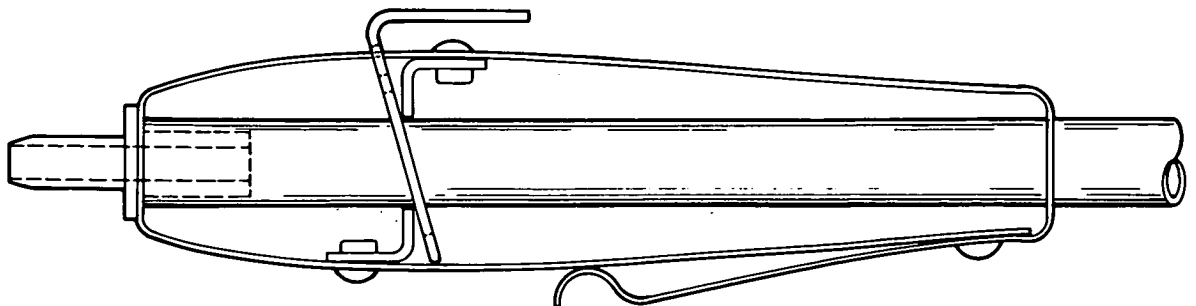


Figure 2. Valve in Open Position

(continued overleaf)

**Notes:**

1. Information concerning this innovation may be of interest to manufacturers of hose clamps.
2. No further documentation is available. Specific questions, however, may be directed to:  
Technology Utilization Officer  
Marshall Space Flight Center  
Code A&PS-TU  
Marshall Space Flight Center, Alabama 35812  
Reference: B72-10687

**Patent status:**

NASA has decided not to apply for a patent.

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